

ASETSDefense Workshop 2016 to be Held December 6–8 in Orlando, FL



Workshop Will Address Alternative Coatings & Surface Treatments

The Strategic Environmental Research & Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP), with support from the Office of the Assistant Secretary of Defense for Acquisition, Technology and Logistics (OASD-AT&L), are sponsoring the ASETSDefense 2016 Workshop—*Sustainable Surface Engineering Technologies for Aerospace and Defense*—to be held December 6–8, 2016 in Orlando, Florida.

ASETSDefense (Advanced Surface Engineering Technologies for a Sustainable Defense) is a SERDP and ESTCP initiative to provide engineering resources and information to the defense industry and a database for testing, qualification, and implementation. Approximately every two years, SERDP and ESTCP supports ASETSDefense workshops to provide an opportunity for design and sustainment engineers, industrial hygienists, and program managers to share recent developments and information on testing and implementing sustainable chemical and process alternatives. Workshops include presentations and posters, with an emphasis on discussion, including side meetings for the detailed examination of particularly significant issues and alternatives that are moving rapidly into production.

Engineers throughout the aerospace and defense industry are under constant and increasing pressure to improve the performance of materials, reduce corrosion and wear, and reduce the cost of acquisition and life-cycle sustainment. Simultaneously, occupational and environmental safety and health regulations are driving the replacement of the common surface treatments to combat wear and corrosion. European companies are under the strongest pressure because of Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations, but U.S. companies and the Department of Defense (DoD) depots are under increasing U.S. Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) pressure to eliminate cadmium (Cd) and hexavalent chromium (Cr + 6). (Note: The DoD REACH

Strategic Plan is available at www.denix.osd.mil/cmrmp/chemicalmanagement/tsca/unassigned/reach-strategic-plan.) Selling and maintaining U.S. weapon systems in Europe means that REACH also affects DoD and U.S. original equipment manufacturers (OEM); however, Cd and Cr + 6 can still be used in the U.S. with appropriate precautions.

The 6th Workshop on Sustainable Surface Engineering for Aerospace and Defense will be held at Shades of Green®, the Armed Forces Recreation Center at Walt Disney World® Resort, Orlando, Florida. Visit www.ASETSDefense.org for links to meeting registration and hotel information. The hotel room block is available from Saturday, December 3 to Saturday, December 10. Guest rooms within the block are secured at the Category 3/TDY rate for standard rooms. Reservations requested after the cut-off date (October 3) will be taken based on availability under the Group Name (ASETSDefense) and Code (1612USOD), at www.shadesofgreen.org.

Occupational and environmental safety and health regulations are driving the replacement of the common surface treatments to combat wear and corrosion.

The replacement of Cd and Cr + 6 in manufacturing and depot maintenance will be featured. However, talks will cover all aspects of developing, testing, and implementing alternative coatings and surface treatments, with emphasis on the practical issues of performance testing, service evaluation, and approval and implementation of alternatives. As in previous ASETSDefense workshops, this meeting will include presentations from international partners—U.S., Canada, Britain, France, Germany, Australia, and New Zealand.

The following sessions are planned:

Session 1: Aerospace and Defense Needs and Approaches

- Keynote: Scot Bryant (Noblis) describing results of a detailed evaluation of Cd and Cr + 6 replacement in Depots—impact, needs, and options
- Initiatives and funding projects in the U.S. and Europe

This meeting will include presentations from international partners—U.S., Canada, Britain, France, Germany, Australia, and New Zealand.

Session 2: Hard Chrome and Other Wear Coatings

- Cold spray, nanophase cobalt-phosphorus, and trivalent hard chrome

Session 3: Cadmium and Chromate Replacement at Depots and OEMs

- U.S. Air Force (USAF) Airworthiness Team and Naval Air Systems Command's (NAVAIR) hazardous materials reduction initiatives to develop, approve and implement alternatives
- Low hydrogen embrittlement zinc/nickel for Cd replacement—exploring in detail its use for landing gear, fasteners, electrical connectors and the F-35

Session 4: Light Materials

- Approaches to improve repair while eliminating chromates, including talks by Airbus in Germany, Socomore and Safran in France, RUAG in Australia, Integran in Canada
- Implementing Tagnite for Army helicopters, and using cold spray to inhibit crack propagation in aluminum airframes

Session 5: Localized Repair

- Non-drip brush plating, Tagnite and cold spray

Session 6: Accelerated Corrosion Testing

- New USAF Advanced Environmental Severity Index

- Improvements over B117 (Standard Practice for Operating Salt Spray (Fog) Apparatus) testing

- Revitalization and modernization of MIL-STD-889 to incorporate computational corrosion modeling and prediction

Session 7: Painting and Stripping Contamination Control

- Laser cleaning and depainting
- Dust minimization during paint sanding

Session 8: Non-Chrome Paint Systems

- Non-chrome primer development and flight testing
- New NAVAIR aluminum-rich primers to inhibit corrosion and stress corrosion cracking
- Office of Naval Research Durable Aircraft and the Future Naval Capabilities Advanced Topcoat System
- Electrocoats, U.S. Army paints and primers, adhesive bond primers
- Phthalates—the next big issue

Special Side Meetings

- Zinc-Nickel
- Cadmium-Chromium replacement in depots
- Gun barrel coatings
- Renewable materials for composites
- Networking and poster session


The entire agenda can be found at www.asetsdefense.org.

For more information about
ASETSDefense 2016,
visit www.asetsdefense.org.

ASETSDefense 2016 has been approved by OASD-AT&L to provide a venue for the exchange of information between DoD repair facilities, program managers, weapons system manufacturers and OEMs, research laboratories, and chemical and coating formulators concerning options, performance, and implementation of alternatives. An official approval letter from OASD-AT&L will be made available to DoD personnel upon request.



For more information about ASETSDefense 2016, visit www.asetdefense.org.

SERDP provides a broad spectrum of basic/applied research and advanced development under an environmental science and technology program of DoD, and is executed in partnership with the Department of Energy, EPA, and other federal and non-federal organizations. ESTCP provides DoD with a demonstration and validation program for environmental technologies and promotes their transition from proof-of-concept to field or production use. For more information about SERDP and ESTCP, visit www.serd-estcp.org. 

Braxton Lewis
Noblis
703-610-2679
Braxton.Lewis@noblis.org

Tell Your Story in *Currents* • Deadline for our Spring 2017 issue is January 20, 2017

Have some good news about your energy or environmental program? *Currents* is the place to tell your story. *Currents*, the Navy's official energy and environmental magazine, has won first place in the Navy's Chief of Information (CHINFO) Merit awards competition three times. Most recently, the magazine snagged an honorable mention in the last CHINFO competition. It's people like you and the stories you submit that make *Currents* the best magazine in the Navy.

So if you have a story that you'd like to promote in our spring 2017 issue, submit your text and images by Friday, January 20, 2017. Any submissions received after this date will be considered for our summer 2017 issue.

You can get a copy of the *Currents* article template by sending an email to Bruce McCaffrey, our Managing Editor, at brucemccaffrey@sbcglobal.net. This template has proven to be a tremendous asset in helping us edit and track your article submissions. Bruce is also available at 773-376-6200 if you have any questions or would like to discuss your story ideas. And don't worry. If writing isn't one of your strengths, we'll handle all of the editing necessary to get your submission into publishable form.

As a reminder, your Public Affairs Officer must approve your article before we can consider it for inclusion in the magazine.

Don't forget to "like" us on Facebook at www.facebook/navycurrents. *Currents'* Facebook page helps expand the reach of the magazine and spread the news about all the great work you're doing as the Navy's energy and environmental guardians.

Currents Deadlines

Spring 2017 Issue: Friday, January 20, 2017
Summer 2017 Issue: Friday, April 21, 2017
Fall 2017 Issue: Friday, July 21, 2017
Winter 2017-18: Friday, October 20, 2017

You can also refer to your 2016-18 *Currents* calendar for reminders about these deadlines.

Chief of Naval Operations Recognizes Environmental Award Winners Via Virtual Ceremony

Navy Saves Time & Money, Reduces Its Carbon Imprint

Chief of Naval Operations (CNO) Adm. John M. Richardson recognized the 29 winners of the fiscal year (FY) 2015 CNO Environmental Awards through a video teleconference (VTC) ceremony at the Pentagon on June 30, 2016.

The Navy selected winners in the ten categories of Natural Resources Conservation, Environmental Quality, Sustainability, Environmental Restoration, Cultural Resources Management, Environmental Excellence in Weapon System Acquisition and Afloat. This marks the fourth year the Navy has minimized its carbon footprint and travel costs by conducting the ceremony as a VTC. Awardees participating in the ceremony represented commands domestically and abroad.

Naval leadership and Department of Defense officials joined the CNO, along with Deborah Nagle, director of the water

permits division at the U.S. Environmental Protection Agency. Representatives of environmental organizations Sierra Club, World Wildlife Fund and Ocean Conservancy, which assisted in the judging process for the awards, also attended. A staffer from the congressional office of Rep. Ander Crenshaw (R-FL) participated, to acknowledge a command win in his district.

During the ceremony, Adm. Richardson spoke about the value of teamwork evident in the winners' efforts, and the value for lessons learned across the organization.

"The accomplishments of all of the winners should serve as opportunity...to educate everybody around us on those

best practices—what can be achieved—by successfully executing the mission and caring for the environment to the benefit of both."

Vice Adm. Philip H. Cullom, deputy CNO for Fleet Readiness and Logistics (N4) and Rear Adm. Doug Morton, then-director of the CNO Energy and Environmental Readiness Division (OPNAV N45), joined the CNO in congratulating the honorees and highlighting their accomplishments.

"I would like to extend my gratitude and sincerest congratulations to these well-deserved winners," said Cullom during the ceremony. "Your achievements embody the spirit of the Navy's responsibility to protect and defend our nation and, more broadly, Planet A—otherwise known as Earth—because there is no Planet B."



CNO Adm. John Richardson congratulating the winners of the FY15 CNO Environmental Awards.
MC1(SW/AW) Nathan Laird

The CNO Environmental Awards program annually recognizes Navy installations, individuals, and teams for their significant achievements and contributions to environmental stewardship. More information can be found at <http://greenfleet.dodlive.mil/environment/awards/cno-environmental-awards>. [📌](#)

Madeline Joyce
Chief of Naval Operations Energy and
Environmental Readiness Division
703-695-5073
DSN: 225-5073
madeline.joyce.ctr@navy.mil

Some Buzz About the “Honey Bee Program” Poster

PERSONNEL FROM THE Pacific Missile Range Facility (PMRF) and the U.S. Pacific Fleet’s environmental outreach program worked together to develop a poster for school students about the efforts at PMRF to protect honey bees. The poster highlights steps in the PMRF honey bee program and the importance of pollinators.

Honey bees contribute to the production of more than 90 crops and pollinate more than 250,000 species of flowering plants.

With a conducive climate and near-by agricultural lands, PMRF can have up to 15 bee swarms per year. Navy staff at PMRF recognized an opportunity and stepped in to help protect honey bees, Navy assets and facility occupants by establishing apiaries for relocating the swarms. Re-directing the bees into apiary hives allows PMRF’s

environmental staff to support honey bee populations by preventing them from being killed while providing additional protection by inspecting the bees for potential pests, monitoring hive health and sharing information with government agencies, researchers and beekeepers on Kauai.

The poster provides key facts about honey bees and illustrates key steps in the PMRF honey bee program. For example, honey bees contribute to the production of more than 90 crops and pollinate more than 250,000 species of flowering plants. It is one facet of PMRF’s effort to inform the public about honey bees and expand understanding of and support for honey bees and other pollinators.

For more details about the PMRF Honey Bee Program, see our article published in the summer 2016 issue of *Currents*—“PMRF Establishing New Hives to Protect Honey Bee Population and Minimize Interference with Base Activities.”

For an electronic copy of this poster, contact Lorraine Wass, our distribution manager, at ljwass@outlook.com and 207-384-5249. 📍

